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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,247	06/19/2006	Matthias Baca	2003PO3602WOUS	2438

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

NATALINI, JEFF WILLIAM

ART UNIT	PAPER NUMBER
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2858

MAIL DATE	DELIVERY MODE
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01/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/549,247		BACA ET AL.	
	Examiner		Art Unit	
	Jeff Natalini		2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/12/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "input side of the high voltage testing device that can be connected to a three phase power supply" in claims 16 and 23 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17, 19-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamer ("Acceptance Testing of Electrical Motors and Generators", cited in the IDS) in view of Kliman et al. (US Publication 20030210059).

In regard to claims 14, 15, 21, 22, and 26, Hamer discloses

(claims 14, 21, and 26) a method/ apparatus for testing faults in a laminated core of a generator (page 1291-page 1 of the article- "Stator Core Test"), a field winding which lies in parallel with an axis of rotation of the generator (figure 1 test supply VM and winding AM lie in parallel with the rotation of the generator) and is connected to a device that produces alternating current (figure 1 VM; last paragraph of column 1 page 1291), an infrared image detection and record device which is designed to detect infrared radiation for inspecting hot spots in the generator (last paragraph of column 2 page 1 under the heading "Stator Core Test"), wherein a frequency makes available a power in a single phase form (last paragraph of column 1 page 1291; see also equation 1) at an output voltage that can be regulated (see equation 1 and the variable elements that make up the test supply voltage).

Hamer lacks specifically disclosing

(claims 14, 21, and 26) wherein the frequency is greater than 50 Hz and the output voltage is at least 400V and

(claims 15 and 22) having a controllable frequency converter for the purpose of converting the fundamental frequency into a higher frequency.

Kliman et al. discloses in a method for evaluating a core stack wherein a frequency is varied over sampling, wherein at the highest point in the specific evaluation the frequency is 200 Hz (see figures 10-17 and paragraphs 36-37 on page 3), in changing the frequency this is considered a frequency converter and the sampling is changed/converted at an increasing rate (see figures 10-17 and paragraphs 36-37 on page 3).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Hamer to including the teaching of Kliman et al. and vary the frequency so the frequency would be sampled at rates up to 200Hz in order to determine a core loss (paragraph 37 page 3). In adding the teaching of Kliman et al. to Hamer, and having a value for frequency in equation 1 of Hamer, the voltage applied would be well over 400 volts/turn.

In regard to claims 16, 17, 23, and 24, Hamer discloses wherein the high speed testing device has an input side which can be connected to a three phase power supply at 400 V (figure 1 at least test supply VM has an input that would be able to be connected to a 400 V three phase power supply).

In regard to claim 19, Hamer discloses wherein the field winding comprises at least two lines (figure 1, VM; connected to ground line and power line).

In regard to claim 20, Hamer discloses wherein the testing device is in the form of a transportable device (the device is connected to the core and is able to be disconnected and transported to a desirable location).

Claims 18 and 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamer and Kliman et al. as applied to claims 14 and 21 above, and further in view of Fischer et al. (6791351).

Hamer as modified lacks wherein an electrical power is made available at a frequency of greater than 400Hz.

Fischer et al. discloses wherein multiple measurements at different increasing frequencies are made in an electrical generator inspection system, including one at 2000 Hz (col 4 lines 32-51).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a measurement of a high frequency value as taught by Fischer et al. in order to comprehensively analyze a fault (col 4 line 45-57).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee (7042229) discloses a system for on line monitoring of insulation condition for DC machines. Hobelsberger et al. (6815957) discloses a method for inspection laminated iron cores of electrical machines for interlamination shorts. Posedel (4996486) discloses a method for inspecting laminated iron core stacks

Application/Control Number:
10/549,247
Art Unit: 2858

Page 6

by magnetizing the stack with an auxiliary winding. Bisson et al. (4573012) discloses a method for measuring core loss of a laminated ferromagnetic structure.

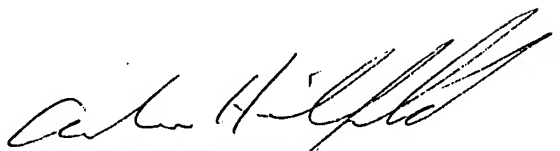
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266.

The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeff Natalini



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